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a first database table that stores information about one or more compounds including said target compound; and
a second database table that stores information about a plurality of compounds,
wherein said chemical similarity join combines a compound from said first database table with a compound from said second database table based on whether the level of similarity between the compound from the first database table and the compound from the second database table is within said neighborhood range; and
providing results of said chemical similarity join to the user.

E2
SUB F1

10. (Thrice amended) A computer-based method for retrieving information that is based upon at least one similarity among entities in a plurality of database tables, the method comprising:
identifying a target item, wherein a first of the database tables includes a row that identifies the target item;
using a computer to perform a fuzzy similarity join on the first database table and a second database table to correlate rows of the first and second tables that have similar properties; and
retrieving at least one item from the result of the join, wherein the retrieved item comprises at least one item having a property similar to a property of the target item.

SUB F1
E3

19. (Amended) A method according to claim 11 further comprising eliminating test items from at least one of the first and second database tables by selection of user-defined criteria for non-desired items.

SUB F1
E4

23. (Twice Amended) A computer-based method for identifying, from a first database table comprising chemical compounds, at least one chemical compound having at least one property similar to a target chemical compound, the method comprising:

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identifying a property of a target chemical compound; and
using a computer to perform a chemical similarity join on the first
database table and a second database table that includes the target compound to identify
at least one chemical compound in the first database table that has a property similar to
the property of the target chemical compound.

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24. (Amended) A method according to claim 23 wherein a user is
informed of the identification of at least one chemical compound in the first database
table that has a property similar to the property of the target chemical compound.

E6 SUB FI
29. (Amended) A method according to claim 23 wherein the similarity
between the properties of the target chemical compound and a chemical compound in the
first database table is determined using at least one parameter from the group consisting
of a Tanimoto coefficient and a Molecular hologram.

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32. (Amended) A method according to claim 23 further comprising
excluding at least one chemical compound in the first database table from the chemical
similarity join by selecting user-defined exclusion criteria for non-desirable compound
features.

REMARKS

Claims 1, and 10-33 are pending in this application. Claims 2-9 and 34-36
have been cancelled in prior amendments. Claims 37-45 have been withdrawn from
consideration by the Examiner, as set forth in the November 9, 2001 Office Action.
Based on the July 2, 2002 Office Action, claims 1, 10-33 stand rejected. Following entry
of the present amendment, claims 1, 10, 19, 23, 24, 29, and 32 will have been amended.

The Section 112 Rejections

The substance of the section 112 rejections, as understood by applicants, is
that the specification describes a join being performed on *database tables* rather than on